# ASSISTANT ENGINEER

Department: DPW

Division: Engineering

Appointing Authority: DPW Director

Grade: S7

Revision Date: 1/2020

Bargaining Unit: S

## **Definition:**

Administrative, technical and support functions for the planning, permitting, organizing and directing of work activities and operations of the Engineering Division, including the in-house design and preparation of plans, drawings and specifications for construction or alteration of sewerage systems, water systems, drainage systems; streets and highways, buildings and other Department of Public Works facilities.

All other work that is logical to the position as required.

#### Supervision:

Works under the general direction and supervision of the Engineering Superintendent. Plans and arranges own work, referring unusual matters to supervisor. Works within established policies and under the general policy direction of the Engineering Superintendent.

May be responsible for some supervision of the Engineering Technicians.

## **Environment:**

Duties are performed under typical office conditions, operates standard office equipment; field work may involve inspection or on-site visits to land use developments, construction sites, or public works facilities. Noise level is usually quiet to moderate.

Performs varied and responsible functions requiring independent judgment to ensure compliance with applicable laws, regulations, and departmental policies.

Has frequent contact with employees, departments, elected and appointed officials, citizen or governmental committees, State and Federal personnel and agencies, vendors, consultants, contractors, outside organizations and the general public.

Has access to confidential information such as departmental bid/proposal information, contracts, and other information regarding departmental business.

Errors in judgment and administration decisions may cause an adverse impact on employee morale, cause confusion and delay; legal or financial repercussions; waste of public funds, lower standards of service that could seriously affect the public image of the department or the City; and significantly impact long-term capital planning and infrastructure.

Must drive self to job sites and locations as necessary.

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#### **Essential Functions:**

(The essential functions or duties listed below are intended only as illustration of the various types of work that may be performed and are representative of those that must be met by an employee to successfully perform the essential functions of the job. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)

Works from sketches, verbal consultation, and parameters or data supplied by supervisor. Discuss various engineering aspects and details with superior, consultants and other parties as appropriate. Obtain component specifications to prepare sketches and preliminary calculations for discussion and approval; also responsible for preparation of record drawings upon completion of projects. Utilizes computer drafting devices and other related drafting supplies and equipment.

Supervise the preparation and distribution of drawings as required; assign work to Engineering Technicians for preparation of working drawings and plans and for revising existing plans or drawings, including information obtained from specifications and/or instructions relating to construction and/or changes to instructions and facilities following prescribed methods, practices and procedures. Coordinate the work of surveyors and obtain and prepare data to accomplish same.

Maintain required files, records and reports, including revising and updating existing plans, maps, charts, etc. as required or directed. Maintains departmental GIS data bases and files. Monitor work of inspectors and analyze reports. Assist consultants in data acquisition as requested for contracted design work. Review design drawings and specifications when submitted by consultants and make recommendations to superiors. Maintain liaison status with consultants.

Review subdivision, ANR, and other project plans as submitted by developers. Analyze all components for adequacy and fulfillment of Zoning or Planning Board and Department of Public Works requirements. Confers and renders technical assistance on engineering matters as required.

Prepare material take-offs for projects and work orders, and prepare estimates of cost. Prepares engineering correspondences for signature.

Performs inspections of construction and /or repair and maintenance of highways, sidewalks, sewer and water systems for compliance with specifications and conformance to good construction practices; inspects materials, grading, drainage, roadside development, curbing, laying of pipe, building of catch basins, manholes and drop inlets, placement of road sub-surfaces and surfaces, pouring of concrete, and related items.

Assists in coordinating the activities of contractors and personnel; investigates public requests and complaints and recommends action. May maintain records of sewer, water, and drainage facilities, roadways, location of utilities, contractors, and utilities.

Prepare construction contract documents, estimates, bids and specifications for public work projects. Prepares applications and necessary documentation for environmental permits. Manages public works construction contracts; coordinates with contractors, inspectors and general public.

Minimum Qualifications: Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying.

#### **Education and Experience:**

Bachelor's degree in civil engineering and three to five years of progressively responsible civil engineering experience, preferably in the public sector; or any equivalent combination of education and experience resulting in the ability to independently perform duties of the position.

Three to five years experience with engineering principles and the design of streets, highways, water drainage and sewerage systems, sewage and water treatment plants and related facilities.

### Knowledge, Ability and Skill:

Basic knowledge of the principles and practices of civil engineering and drafting. Familiarity with statutes, governmental regulations and codes; departmental policies, procedures and standards pertinent to the design and construction of municipally owned streets, structures and facilities. Ability to plan, manage others, analyze, carry out projects, consult and offer advice, and facilitate groups; requires effective written and oral communication skills.

Ability to establish and maintain satisfactory relationships with supervisors, subordinates, coworkers, community representatives, and the general public. Ability to direct subordinates in an efficient and positive manner. Ability to establish short range plans and objectives within scope of policies and goals. Must be punctual and perform all aspects of job responsibilities with honesty and integrity.

Thorough working knowledge of departmental functions and operations; of standard office practices and procedures; of use and operation of standard office equipment; ability to operate a personal computer in a windows environment with proficiency in MS Office, AutoCAD, GIS and G-Suite required; familiarity with database programs and computer hardware and software systems.

#### **Physical Requirements:**

Designing, drafting, calculating and related duties involve concentration of mental and visual attention with manual coordination for sustained periods.

Light to moderate physical effort required from time to time to perform manual tasks on-site and possibly under adverse weather conditions. Normal working day may involve walking, standing, and sitting, with moderate to frequent body movements such as reaching, bending, twisting, grasping, pulling and pushing materials. Good vision required for instrument reading and ability to perform close vision, distance vision, peripheral vision, color vision and the ability to adjust focus. Ability to use computer keyboard and write instructions under standard office conditions.

**Special Requirements:** Must successfully pass CORI/SORI checks. Must possess a valid Class D driver's license. Must have an acceptable driving record and be insurable under city's policy; some evening work may be required to attend meetings and hearings.

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(This job description does not constitute an employment agreement between the employer and employee. It is used as a guide for personnel actions and is subject to change by the employer as the needs of the employer and requirements of the job change.)

Approved:

Human Resources Director

Date

Revision History: 2/79, 3/86, 6/89, 2/02; 6/05, 9/08, 1/2020

Department Head

[SSEA Review \_\_\_\_\_ CM ]

Mayor